

FIRST RECORD OF THE ALPINE WATER SKINK, *EULAMPRUS KOSCIUSKOEI* (KINGHORN, 1932) (SQUAMATA: SCINCIDAE) FROM QUEENSLAND.

Memoirs of the Queensland Museum 52(2): 238, 2008.—Water Skinks (*Eulamprus quoyii* species group) are a lineage (O'Connor & Moritz, 2003) of moderate-sized, diurnal skinks occurring in south-eastern and eastern Australia. They are commonly located in proximity to moist environments (O'Connor & Moritz, 2003; Hutchinson & Rawlinson, 1995), and are prominent members of the herpetofaunal communities in which they occur. Only a single species, *Eulamprus quoyii* (Duméril & Bibron), has been recorded from Queensland to date (Arnold, 1967; Covacevich & Couper, 1991), although preliminary genetic studies suggest that more than one species may occur in *E. quoyii* (O'Connor & Moritz, 2003; S. Keogh, pers. comm.). The other four species in the lineage, *E. heatwolei* Wells & Wellington, *E. kosciuskoei* (Kingham), *E. leuraensis* Wells & Wellington and *E. tympanum* (Lönnerberg & Andersson) are more southern in distribution, occurring mostly in New South Wales and Victoria.

While examining samples of *E. quoyii* in the collection of the Queensland Museum as part of a study of morphological variation in this species, we discovered two specimens, QMJ1227-1228, which we consider to be *Eulamprus kosciuskoei*. These two individuals, from Stanthorpe (presumably the town at 28°40'S 151°56'E, near the NSW border in south-east Queensland), collected by F. Boyce and donated by J. Arnold, were identified by Arnold (1967) as *E. quoyii*. Since receipt by the Queensland Museum, they had been identified as *E. kosciuskoei*, then reidentified as *E. quoyii*. There is no date of collection associated with the records, but they were presumably registered into the QM collection in the early 1960s, based on other registrations around them.

The two specimens have the following characters, scale counts and measurements (J1227 first, where differences occur between the specimens; character definitions follow Shea & Peterson, 1985): prefrontals broadly or narrowly contacting medially; supralabials 7; supraciliaries 9L/9R, 10L/9R; midbody scales 36; paravertebral scales 63; lamellae below fourth toe 24L/25R, 21L/21R; snout-vent lengths 75.5, 50.5mm; axilla-groin lengths 37.5, 23mm; forelimb lengths 18, 14mm; hindlimb lengths 28, 20.5mm; head lengths 15.5, 11.6mm; head widths 10.9, 7.7mm; head depths 8.7, 6.5mm. One of the specimens (QMJ1227) is a mature but non-reproductive female, while J1228 is a non-reproductive male.

In colouration and scalation, both specimens agree with the northern form of *Eulamprus kosciuskoei* (Shea & Peterson, 1985), and are readily differentiated from regionally sympatric populations of *E. quoyii* which have: paravertebral scales 65-77 ($n = 9$); subdigital lamellae 25-32 ($n = 9$); snout-vent length of mature individuals 82-112.5mm ($n = 8$); the body dorsum with scattered dark spots (vs lacking scattered spots, but with a narrow dark laterodorsal stripe, extending to the sacral region, and medial to a paler dorsolateral stripe, either of the dorsal ground colour or a paler shade); at most, a narrow, broken extension of the pale ventral colour along the anterior margin of the ear (vs a broad dorsal extension of the pale ventral colour in this position); at most, a few pale flecks longitudinally aligned from the dorsal margin of the ear along the neck to nearly above the forelimb (vs a broad pale stripe

in this position); a random scattering of dark spots and flecks along the lateral side of the tail (vs dark spots aligned in multiple transverse rows), and the body venter (in preserved individuals) with a yellow tinge at least posteriorly (vs body venter completely clouded blue-grey).

The locality for these specimens is 100km NNW of the nearest previous record of *E. kosciuskoei*, from Waratah Swamp, Gibraltar Range National Park, NSW (29°30'00"S 152°19'40"E, Australian Museum R96836-37). The latter locality is itself nearly 70km NNW of the next nearest locality for the species (several Australian Museum records from Marengo State Forest).

The locality for QMJ1227-28 is not precise, just giving the town as a locality, and hence some residual doubt must remain about the veracity of the record. However, there is potentially suitable habitat for *E. kosciuskoei* in the vicinity of Stanthorpe, Northern NSW populations of *E. kosciuskoei* have been collected from subalpine button grass swamps and sphagnum bogs (GS, pers. obs.) and a series of such swamps extends north of Ebor, through Gibraltar Range and on to the Queensland border (Hunter & Bell, 2007). Moss and peat swamps are present in Girraween National Park, less than 25km south of Stanthorpe (R. Hobson, QPWS, pers. comm.), and efforts should be made to search for the species in these and other nearby sites to verify the existence of this species in Queensland.

Comparative material of *Eulamprus quoyii* examined: QMJ1223-24, J14250-51, J16403-04, J26041, J30738, J78171.

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